Midterm 1

International Economics
Monterey Institute of International Studies
Fall Semester 2001
Dr. Robert M. McNab

Instructions: You may use any material you believe necessary to answer each question, to include lecture notes, the recommended readings, or other materials. You may not collaborate in any way with another student in this class. The instructor reserves the right to give any student an oral exam in lieu of this written exam if collaboration is suspected.

Time: The deadline for this exam is Tuesday, November 6, 2001 at 6pm. You may email your answers before the deadline or present your completed exam in person. The instructor will not accept exams that are turned in late.

Structure: Read each question carefully. In some cases, a question may be dependent upon your answer to a previous question. Answer each question to the best of your ability. Each answer will be graded completely, that is, if you include supplemental information in your answer that is not correct, the supplemental information will also be graded. Complete, concise answers have historically received higher grades than complete, rambling answers. Finally, the student should completely edit their exam to ensure that no significant style, grammar, or content errors remain before submitting the exam for grading.

1. Discussing comparative advantage (10 Points)

    a. How does the concept of comparative advantage relate to a nation's transformation schedule?

    b. Illustrate graphically how a nation's comparative advantage can shift due to changes in the shape of its transformation schedule.

    c. Discuss, in your own words, the factors that can influence a nation's comparative advantage and how changes in those factors may change a nation's comparative advantage.

2. Marginal Rate of Transformation and Marginal Rate of Substitution (25 Points)

    a. Define the Marginal Rate of Transformation and the Marginal Rate of Substitution, provide a numerical example of calculating the MRT and MRS in a two-good environment, and illustrate graphically the MRT and MRS in a constant-cost environment.

b. Discuss, in your own words, how the MRT and MRS are used to find the autarkic and post-autarkic states. Illustrate graphically the transition from the autarkic to the post-autarkic state in an increasing cost environment characterized by two nations and two goods.

c. In your own words, discuss why the MRT and MRS are equal in the post-autarkic state.

d. What assumption in factor endowment theory suggests that the post-autarkic consumption point is the same for the two countries? Why is this assumption made in the factor endowment model?

3. Trade Equilibrium (15 Points)

a. Discuss the concept of an offer curve and provide a two nation, two good graphical example of how offer curves can be used to find the trade equilibrium.

b. Using your illustration in 3a, assume that the terms of trade are such that a disequilibrium exists in the export-import market for the two nations. Illustrate what is the affect of the disequiblibrium terms of trade and how market forces adjust the terms of trade back to its equilibrium level.

c. Using your illustrations in 3a and 3b, discuss and illustrate how technological or factor endowment changes may influence a nation's offer curve.

4. Diminishing Returns and Trade Theory (25 Points)

a. Discuss, in your own words, how the Laws of Diminishing Marginal Returns and Utility are related to indifference curves and transformation schedules, respectively, and how these observations can result in a linkage between indifference curves and the law of demand and transformation schedules and the law of supply.

b. Discuss, in your own words, how diminishing marginal returns to production is related to factor endowments, which in turn influences a nation's comparative advantage.

5. Policy #1 (25 Points)

a. Assume that you are assigned to a USAID mission in a developing country. The country is characterized by high tariffs on imported goods, an abundance of labor relative to its neighbors, and a relative lack of capital. Currently, the nation is concentrating on developing local alternatives to imported, capital-intensive goods and recently announced a

new government program to develop an automobile industry and a computer industry.

b. If these policies were put into place, would you expect prices on domestically produced capital-intensive goods to be higher or lower to prevailing world prices? Why?

c. What does factor endowment theory suggest would be the more appropriate course of action for the nation?

d. Would you suggest trade liberalization? If so, what advice would you offer the government on the problems and benefits associated with liberalization? If not, explain the costs and benefits of maintaining high tariffs and other barriers to imports.